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Argo nebula for a proof that the bright knot just mentioned was not due to instrumental glare in the faint region round η .

The distant stars and branches of 30 *Doradus* were hastily put in from rough eye estimates of their position referred to the bright central region. The bright South loop (Herschel) appeared very faint in 1874. There does not seem to have been much change amongst the involved stars, if allowance be made for eye determinations of position as compared with micrometric places, especially places obtained by Sir J. Herschel.

A pocket spectroscope inserted in the place of the eyepiece of the 12-inch reflector showed a strong continuous spectrum crossed by a bright line, estimated to be the nitrogen line of the nebular spectra. The continuous spectrum appeared to be too bright and free from longitudinal streaks to be attributed, even mainly, to the minute stars involved in the nebula.

The Nebula of η Argus.

The sketch must speak for itself, as I was not fortunate enough to obtain many notes on the nebula. Those which were obtained are as follows: η was considered to be 9 mag. (Herschel's scale) and orange red. It was well outside the bright nebulosity East of the "Lemniscate." (N.B. In the copy of Sir J. Herschel's drawing of the region, η has been placed somewhat too near the vacuity.) The stars in Sir John's drawing have in most cases their counterparts shown in the sketch of 1874. I am disposed to doubt whether there has been any great change in the region depicted during the forty years separating the epochs of the observations. η I thought had not so "hard" a disk as that of the 8.5^m ruby near β Crucis, with which it was compared under the same power, 400 linear, which was used in making all the sketches of the nebulae described.

Mr. Abbott's drawing of the Argo nebula was at once recognised on making use of an achromatic of 2.75 inches aperture, power 100, with which the "Lemniscate" was utterly invisible.

1875, Nov. 12.

Note on a new Variable Star in Capricornus. By J. E. Gore, Esq.

(Communicated by Mr. Browning.)

Just north of and a little preceding the 6 mag. star 4 *Capricorni* Sir John Herschel, in the "Cape Observations," describes a red star as "a fine ruby star, perhaps the finest of my ruby stars," and estimated its magnitude at 6½ mag. Failing to see a trace of this star with the naked eye, or even with an opera-glass, I lately examined its place with my 3-inch achromatic and found the star to be only 8½ or 9 mag. and fiery red. The star is marked 7 mag. in

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Harding's Atlas (1822) and was rated $7\frac{1}{2}$ mag. by Lalande. If Herschel's estimate of its magnitude was correct, the star must be variable to the extent of at least two magnitudes. It should be watched, as so many of these deep red stars are known variables. Close by *n.f.* is a fainter star of about $10\frac{1}{2}$ mag. As I can find no previous record of any observations on the variability of this star, I propose to name it *V Capricorni*.

On some Old Drawings of Saturn. By C. L. Prince, Esq.

A few years since I obtained from Holland a copy of the whole of the works of Gassendi, which were published at Lyons in the year 1658, three years after his death. Copies of this publication are very rarely met with in England, and are not contained in the catalogues of the libraries of either the Royal Society or the Royal Astronomical Society. The fourth volume is devoted to Astronomy, and I find that between the year 1633 and 1656 are given twenty-one drawings of the planet *Saturn*. As these engravings are, so far as I am aware, the first representations of the planet ever published, I have sent herewith tracings of eight of them,* believing that, if engraved in the *Monthly Notices*, they would prove interesting to many Fellows of the Society as depicting the gradual progression in knowledge of *Saturn's* form as well as the difficulties which must have been encountered by the observer on account of the unsteady mounting and imperfect definition of the earlier telescopes. The following are literal copies of Gassendi's remarks upon each drawing :—

“No. A. June 19, 1633.—Postea circiter decimam cum per varios nubium hiatus Saturnum tubo respicerem, is quasi ovum sericum, seu quo bombyx filo deducto concluditur. Diameter longior (existens ferè secundum longitudinem Zodiaci) vix apparuit minor diametro Venerea, utraque nempe visa est repetita octies aut decies adæquatum proximè diametrum foraminis tubi. Et à parte quidem anteriore ansa, seu appendicula ostensa est confusior; sed à posteriore exhibita est omnino distinctè; totumque hâc propè magnitudine et formâ conspectum est; siquidem interdum corpus Saturni rotundum, neque radiis undique ansas complectentibus visum est; interdum vero cum ipsis ansis ob circum effusos cincinnos confusius.”

“B.—Saturnus telescopio maximo visus est oblongus, et qualis semper aliàs.”

* It was not thought necessary to engrave these tracings for the *Monthly Notices*.—ED.